

A
T R E A T I S E
ON THE
EPIDEMIC PUERPERAL FEVER
OF
A B E R D E E N.

BY
ALEXANDER GORDON, M. D.

PHYSICIAN TO THE DISPENSARY.

LONDON :
PRINTED FOR G. G. AND J. ROBINSON,
PATERNOSTER ROW.

1795.

320392



Spec. coll.

TO
DR. THOMAS DENMAN,

THE FOLLOWING

T R E A T I S E

IS INSCRIBED, AS A

SMALL TOKEN OF RESPECT,

BY HIS

AFFECTIONATE FRIEND,

ALEXANDER GORDON.

P R E F A C E.

THE design of the following Treatise is, to investigate the cause, ascertain the nature, and establish the treatment of a disease, which has, hitherto, been the subject of great dispute among medical practitioners. For though many eminent physicians have published their observations upon it, yet their labours have not been attended with great success; so that what a celebrated author says of the Dysentery is very applicable to the Puerperal or Child-bed Fever; viz. “that the pen of
“writers has done little more than record
“the times and places when and where it
“proved most fatal; the appearances it put
“on; its symptoms; its devastation; and
“a variety of modes of treatment, that
“had no certain success.”

The mortality, attending the Puerperal
a Fever,

Fever, is truly lamentable. In the year 1750, at Paris, none, who were seized with it, recovered. In one hospital in London, in the space of two months, thirty-two patients were affected with the disease, and all, except one, fell victims to it. In another hospital, nineteen were seized with it, during the epidemic season, thirteen of whom died. In the lying-in ward at Edinburgh, all, who were attacked with it, in the epidemic season, died.

A professor of midwifery, in the university of Edinburgh, declared the Puerperal Fever to be incurable; and another professor, in the same university, concludes his observations upon it with the following words: " From the above cases, and from
 " all that has been yet written upon this
 " subject, we may with great truth con-
 " clude, that we know little of the nature
 " and still less of the cure of the Puerperal
 " Fever."

In this state of matters, it is certainly the duty of every practitioner, who has been
 successful

successful in treating the disease, to publish his observations. And, as an extensive practice has enabled me to make some important observations on the Puerperal Fever, I shall make no apology for laying them before the public. On the contrary, I think it incumbent on me to make an apology for not discharging this duty sooner.

The delay was occasioned, partly by the laborious duties of my public office, but especially, by a complication of domestic calamities.

The observations, which I have to offer, are of the utmost importance to society, and I am only diffident of my ability to express them in the manner they deserve. I have, however, made an attempt, which, I hope, will meet with a favourable reception from the public; especially, as I have advanced no opinion that is not an obvious conclusion, immediately resulting from facts, and as all the facts may be depended on.

Copious bleeding, which was found so efficacious in curing the disease, has been recommended both by Dr. Leake and Dr. Denman; but the former has recommended large and practised small bleedings; and, though the latter has recommended large bleeding, yet he has left the quantity undetermined. This defect is supplied in the following work; for I have both limited the quantity of blood necessary to be taken away, and fixed the time when the taking away of that quantity will certainly cure.

To the Treatise I have added an Appendix, in which I have been led to examine the opinions of some of the best writers on the Puerperal Fever. This, notwithstanding its tendency to involve me in controversy, which I very much dislike, could not well be avoided, because, without it, the work would have been defective. For, in it, several practical points of great importance are established, and, in particular, it is proved, that all the different varieties of the disease require the same treatment; because,

because, whatever be the cause, the effect is the same, viz. abdominal inflammation. The discussion of this point will relieve the minds of inexperienced practitioners from many doubts and difficulties, which must have otherwise perplexed them.

The benevolent reader must observe, with displeasure, the ungenerous treatment, which I met with, from that very sex, whose sufferings I was at so much pains to relieve; for, while I was using my best endeavours to mitigate the calamities of many miserable sufferers, several others were very busy in traducing my character, who, prompted by prejudice, very uncandidly, proclaimed the deaths, and concealed the cures, on purpose to raise an odium against my practice. This was hard; but it was some consolation to me to reflect, that a similar misfortune happened to one of the greatest ornaments of our profession, the illustrious Dr. Sydenham, who has been very properly styled the modern Hippocrates. Uncommon sagacity and diligent observation enabled

bled him to discover a successful method of treating most diseases, for which he was rewarded with ingratitude and defamation. But this worthy man, actuated with the purest philanthropy, was more solicitous to do good to mankind than to be praised by them, expecting his reward elsewhere.

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A T R E A T I S E
ON THE
EPIDEMIC PUERPERAL FEVER
OF
A B E R D E E N.

C H A P. I.

HISTORY AND SYMPTOMS OF THE DISEASE.

HISTORY.

THE disease, which I propose to describe, made its appearance at Aberdeen in the month of December 1789, and prevailed as an epidemic among lying-in women till the month of March 1792, when it finally ceased.

This epidemic seemed, in every respect, to answer the description of the Puerperal or Child-bed Fever, on which many authors have written, particularly Doctors Hulme, Denman,
B man,

man, and Leake, who have described it with great ability.

The Puerperal Fever, according to the account given of it by authors, is more frequent and fatal in large towns, and in hospitals, than in the country, and private practice. But that under consideration was not confined to the town of Aberdeen, but extended to the suburbs and contiguous country, where it proved as fatal as in the heart of the city. It was not peculiar to any particular constitution, or temperament, but promiscuously seized women of all constitutions and temperaments; for the strong and the weak, the robust and the delicate, the old and the young, the married and the single, those who had easy, and those who had difficult labours, were all equally and indiscriminately affected.

It prevailed principally among the lower classes of women, and, on account of my public office, and extensive practice in Midwifery, most of the cases came under my care. But women in the higher walks of life were not exempted, when they happened to be delivered

livered by a midwife, or physician, who had previously attended any patients labouring under the disease.

In the history of this disease, an account of the weather and state of the atmosphere will, no doubt, be expected ; but though I paid particular attention to these, I have omitted any such account, because I discovered, that the disease was occasioned by a cause very different from the sensible qualities, or constitution of the air. What that cause was shall be mentioned afterwards, in its proper place. For the present I shall only remark, that, by observation, I plainly perceived the channel by which it was propagated ; and I arrived at that certainty in the matter, that I could venture to foretell what women would be affected with the disease, upon hearing by what midwife they were to be delivered, or by what nurse they were to be attended, during their lying-in : and, almost in every instance, my prediction was verified.

The disease was new and unknown in Aberdeen, and a very powerful prejudice prevailed

against the treatment proper for curing it ; for the cure depended upon bleeding and purging, and both were repugnant to popular opinion. The only disease, supposed by the vulgar to be incident to lying-in women, is a disorder commonly called the Weed, which is an ephemera similar to the paroxysm of an intermittent fever, and always terminates without any danger. Puerperal Fever was a term, and a disease, to which they were total strangers. And, because its attack was always with a rigor, or cold fit, it was, for that reason, confounded with the Weed, and the same treatment recommended. On this ground, heating cordials were profusely exhibited by female practitioners, who are as numerous now in Aberdeen, as they were formerly in London, in the days of Sydenham ; but they obtained no great credit by such a practice, for none who were treated in this manner recovered.

The disease was not only unknown to the vulgar, but even medical practitioners had very little experience in treating it ; most of whom had no other knowledge of the disease, than

than what they had derived from books ; and the book, most commonly read, was a work which represents the Puerperal Fever as a putrid disease ; the performances of Doctors Hulme, Denman, and Leake, the best writers on the subject, being in very few hands. For though a similar disease was epidemic in Aberdeen in the years 1760 and 1761, yet there was no physician alive, who practised at that time, to assist by his experience on this pressing occasion. Such was the situation of matters when the Puerperal Fever made its appearance in Aberdeen ; and I thought proper to call in two of the oldest, most respectable, and most experienced practitioners of the city, who were men of no less candour than skill, and possessed minds perfectly open to conviction ; so that if any doubts remained with respect to the nature of the disease, they were thoroughly removed upon seeing the cases, dissections, and method of cure,

S Y M P T O M S.

With respect to these I may truly affirm, that there is scarce any disease more regular

in its time and manner of attack, or more uniform in its appearance and symptoms. It most commonly commenced on the second, or third day after delivery ; for, except in two cases, it always seized the patient before the secretion of the milk ; and three-fourths of the whole were taken ill on the day after delivery, in the afternoon, or evening. Its attack was regularly with a violent rigor, or shivering fit, which was succeeded by a great degree of heat, rapid pulse, and severe pain in the abdomen, which was always very tender to the touch, and when pressed occasioned great uneasiness. These were the principal pathognomic, or characteristic symptoms, essential to the disease.

But, unfortunately for the patient, it too often happened, that the cold fit, which ushered in the disease, was called a weed, and not considered as dangerous ; and that the pain in the abdomen was, by nurses and midwives, mistaken for after-pains, and little attention paid to it. These were fatal mistakes for the patient, because, by the delay thereby occasioned, the disease was incurable before

assistance was sent for. And this delay frequently happened, notwithstanding I was at particular pains to explain to all concerned in the charge of lying-in women the difference between them, which was by no means difficult to be understood. For the pain of the Puerperal Fever is constant, and after-pains periodical ; in the Puerperal Fever the abdomen cannot be pressed without occasioning great pain, in the after-pains the abdomen is not painful to the touch ; in the Puerperal Fever the pulse is always very quick, in after-pains the pulse is not at all affected.

The pain was generally seated in the hypogastric region, and in a few cases, there was a pain which darted from the pit of the stomach down to the spine ; but in three-fourths of the whole, the principal seat of the pain was the right side, near the origin of the colon. The pain, in whatever part it was seated, was so excruciating that the miserable patients described their torture to be as great, or greater than what they suffered during labour.

Some complained of a violent pain in the small of the back; and many complained of a severe pain in the lower extremities, which being too frequently taken for rheumatism, was another fatal cause of mistake.

The pulse was sometimes hard, but more frequently weak, and acquired an uncommon velocity at the beginning of the disease; for, except in two or three cases, in which the pulse was at the rate of 128, in all the rest it was not under 140 strokes in a minute, very early in the disease. And, unless the disease was early checked by proper remedies, it continued to increase in quickness, till it exceeded 160 strokes in a minute; and, before the fatal close, it generally became too quick to be numbered.

In most of the cases, especially those which had been neglected at the beginning, there was a considerable tumefaction of the abdomen, which, as the disease advanced, frequently became as much distended as before delivery.

The

The tongue in most cases was white, but soft and moist; in those, however, which were long protracted, it became dry and rough, having the same appearance as in typhus.

The urine was sometimes high coloured, but more frequently turbid, and was often passed with pain and difficulty.

The blood taken away in this disease had always a very thick inflammatory crust, and was exactly similar to that of patients in pleurisy and rheumatism.

The skin was generally hot and dry, but sometimes it was moist; and an universal sweat was diffused over the whole of the body, pretty early in the disease, even in some cases which terminated fatally. Partial sweats, however, were very common, and when cold and faint, and confined to the face and breast, announced the approach of death.

A circumscribed crimson colour in the cheeks

cheeks was a symptom which sometimes occurred towards the close of the disease, and was a mortal symptom.

A vomiting of bile, of a green colour, was a symptom which frequently occurred, especially when the patient was costive: and, when there were symptoms of mortification, what the patient vomited was black, and had a strong resemblance to the grounds of coffee.

A diarrhoea was a frequent symptom, and was a symptom rather to be desired than dreaded; for, without a spontaneous, or artificial diarrhoea, very few recovered. The stools were frothy, and of a yellow, greenish, or dark brown colour; and every discharge by stool seemed to give temporary relief: but, towards the end of the disease, they were frequently involuntary, and, sometimes, became black and very fetid, resembling moss-water, and were one of the symptoms of internal mortification.

The lochial discharge commonly continued to flow as usual, though in some the discharge was

was diminished, yet, in few or none, was it wholly suppressed. In those cases which terminated fatally, the secretion of the milk never took place, and, in such as recovered, there was no secretion of it till after the crisis.

As the disease advanced, especially when the pain was great, and the abdomen much distended, respiration was performed with great difficulty. This did not appear to be owing to any complaint in the thorax, but to the mechanical compression, made upon the tender viscera of the abdomen, by the diaphragm and abdominal muscles during respiration, which were too tender to bear the smallest pressure, without occasioning the most exquisite pain.

The situation of the patient, at this period of the disease, was truly deplorable ; for the pain of the abdomen, already excruciating, was aggravated by the act of respiration, and by the smallest motion of the trunk. The miserable patient, therefore, lay on her back
incapable

incapable of turning on either side, and unable to breathe. Death, in such circumstances, was an event to be much wished for.

The intellectual faculties were sometimes, but not frequently, deranged ; for I seldom observed a delirium, except in a few improperly treated, or neglected cases, to which I was called late in the disease. But, in general, the patient retained her senses to the last.

In all of them the attack was sudden, without any previous complaint or indisposition,

This disease, when left to nature, or improperly treated by art, generally proved fatal. Nor was it commonly less regular in its crisis, than it was in its time of attack ; for, as it commonly seized the patient on the day after delivery, so it commonly proved fatal on the fifth day from the attack ; and, of such as died, more than a half died on the fifth day. Some died with great composure, others in great

great pain. For, in some, there was a total cessation of pain, a few hours before death; and, while the patient was transported, with the sudden transition from extreme pain to perfect ease, and overjoyed with the thoughts of recovery, death came by surprise, and carried her off, amidst the congratulations of her friends. To such patients death might be said to be rather pleasant, than painful. Several, however, had a violent struggle, and died in great agony.

When called in the beginning of the disease, that is, within six, or eight hours after the attack, I was often able to put an immediate stop to it, even when the pulse was at the rate of 140. But when the patient had been ill, twelve, or twenty-four hours before I was called, I was not able to bring the disease to an immediate conclusion; the most I could do, in such cases, was to check its violence, and overcome it by degrees; for I could seldom bring it to a complete termination before the fifth day.

But,

But, when the patient had been ill, for a longer space than twenty-four hours before I was sent for, I generally found, that the disease was no longer in the power of art.

C H A P. II.

CASES AND DISSECTIONS.

BEFORE I proceed to the consideration of the nature and cause of the disease, it will be proper for me to give a narrative of the cases, and likewise a description of the appearances, discovered by the dissection of such patients as died of the disease. On these, which are so many established facts and incontrovertible truths, my doctrine of the Puerperal Fever is grounded.

There was such a similarity in the cases of the several patients, that to give a minute detail of every individual case would be a tiresome tautology. I shall, for that reason, select only a few out of the whole as specimens.

But

But some general circumstances relating to every case are comprehended in the annexed table, which contains all the cases that came under my care. And, to this table, I shall have occasion frequently to refer, in the course of the work.

A T A B L E

Containing an Account of those Patients affected with the PUERPERAL FEVER, who were attended by
Dr. GORDON, from December 1789 to October 1792.

When taken ill.	No.	Name.	Age.	Residence.	Cured	Dead.	By whom delivered.
1789.							
December	1	James Garrow's wife	27	Woolman-hill		5th day	Mrs. Blake
Ditto	2	James Smith's wife	30	Ditto		23	Ditto
Ditto	3	John Smith's wife	34	Green		11	Mrs. Elgin
Ditto	4	Al. Mennie's wife	25	Hardgate		11	Ditto
1790.							
January	5	John Anthony's wife	25	North-freet		3	Dr. Gordon
February	6	Christian Durward	36	Rottenholes		3	Ditto
April	7	Al. Stuart's wife	30	Denburn	1		Mrs. Philp
May	8	William Elrick's wife	34	Exchequer-wynd	2		Mrs. Blake
Ditto	9	Elizabeth Murray	28	North-freet		7	Ditto
Ditto	10	Helen Mitchell	30	Ditto			Ditto
Ditto	11	Janet Wier	34	Denburn	3		Mrs. Elgin
August	12	Mrs. Johnston	36	Littlejohn's freet	4		Mrs. Smith
Ditto	13	Geo. Webster's wife	38	Fowler's-wynd	5		Mrs. Blake
					6		

(17)

When taken ill.	No.	Name.	Age.	Residence.	Cured	Dead.	By whom delivered.
1790.							
August	14	Peter Paul's wife.	32	Windmill-brae	7	5th day	Mrs. Blake
Ditto	15	John Low's wife	25	Justice-mills	8	—	Mrs. Smith
Ditto	16	Mrs. Milne	27	North-freet	—	—	Mrs. Blake
September	17	Isabel Allan	36	Birnie's-clofe	5	—	Mrs. Coutts
Ditto	18	Robert Burr's wife	30	Gallowgate	2	—	Mrs. Irvine
October	19	Al. Eddy's wife	36	Ditto	3	—	Mrs. Clark
Ditto	20	Agnes Milne	24	Putachie-fide	9	—	Ditto
Ditto	21	Al. Stuart's wife	26	Green	10	—	Mrs. Blake
Ditto	22	Elizabeth Jamieson	25	Windmill-brae	11	—	Dr. Gordon
Ditto	23	Dundas Nicol's wife	25	Green	—	—	Mrs. Philp
Ditto	24	Al. Brown's wife	27	Loan-head	5	—	Mrs. Elgin
Ditto	25	Anne Smith	24	Denburn	5	—	Ditto
Ditto	26	Mrs. Malcom	25	Green	1	—	Ditto
Ditto	27	Wm. Robertson's wife	30	Gilcomston	5	—	Mrs. Emslie
Ditto	28	Jean Webster	17	Justice-port	12	—	Mrs. Anderson
November	29	Anne Cumming	29	North-freet	13	—	Ditto
Ditto	30	Margaret Still	25	Ditto	14	—	Ditto
Ditto	31	Janet McKay	38	Gallowgate	15	—	Mrs. Clark
Ditto	32	Jean Laing	32	Ditto	—	7	Dr. Gordon

When taken ill.	No.	Name.	Age.	Residence.	Cured	Dead.	By whom delivered.
1790.							
November	33	Mrs. Leitch	40	Carnegie's-brae	16		Dr. Gordon
Ditto	34	Anne Barclay	20	Tannery-freet	17		Mrs. Clark
December	35	Mrs. Muffart	36	Hardgate	18		Mrs. Davidson
Ditto	36	Jean Galloway	27	North-freet	19		Mrs. Anderson
Ditto	37	Janet Anderson	25	Putachie-fide		5th day	Mr. Harvey
Ditto	38	Mrs. —	25	—		5	Dr. Gordon
1791.							
January	39	Al. Main's wife	40	Poinernook		1	Mrs Henderfon
February	40	Violet Thom	25	Green	20		Dr. Gordon
Ditto	41	Mrs. Home	22	Carnegie's-brae	21		Mrs. Ogilvie
Ditto	42	Mrs. Walton	25	North-freet		11	Ditto
Ditto	43	Elspet Riach	25	Ditto		5	Mrs. Balfour
March	44	Janet Cornack	25	Back-wynd	22		Ditto
Ditto	45	Andrew Duncan's wife	26	Ditto		5	Mrs. Blake
Ditto	46	Anne Davidson	34	Justice-port	23		Mrs. Anderson
Ditto	47	Elspet Fife	30	Windmill-brae	24		Mrs. Keith
Ditto	48	Margaret Forbes	40	Footdee	25		Mrs. Anderson
April	49	Janet Robertson	36	Correction-wynd	26		Mrs. Coutts
Ditto	50	Wm. Gibbon's wife	27	Ditto	27		Dr. Gordon

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When taken ill.	No.	Name.	Age.	Residence.	Cured	Dead.	By whom delivered.
1791. April	51	John Duncan's wife	26	Woman-hill	28	7th day	Mrs. Keith
Ditto	52	James Davidson's wife	25	Castle-freet	29		Dr. Gordon
Ditto	53	Rachel Gordon	36	Ditto	30		Mrs. Mitchell
May	54	Mrs. Clark	25	Gallowgate	30		Dr. Gordon
Ditto	55	Geo. Duthie's wife	30	Torry		5	Mrs. Philp
June	56	Anne Molison	27	Windmill-brae	31		Mrs. Emflic
Ditto	57	Mrs. Henrie	30	Lodge-walk	32		Mrs. Elgin
September	58	Elspet Robertson	25	Shoe-lane	33		Mrs. Blake
Ditto	59	Rachel Leith	25	Back-wynd	34		Mrs. Taylor
Ditto	60	Mrs. Thomson	25	Lodge-walk	35		Dr. Gordon
October	61	Mrs. Ligertwood	30	Queen-freet	36		Ditto
Ditto	62	Widow Forbes		Printfield	37		Mrs. Taylor
November	63	Mrs. Brown	42	Fintray		5	Mrs. Mitchell
Ditto	64	Mary Meldrum	32	Windmill-brae		5	Mrs. Chalmers
December	65	Jean Brown	36	Vennel	38		Mrs. Anderfon
Ditto	66	Margaret Yull	23	Castle-freet	39		Dr. Gordon
Ditto	67	Anne Hervie	23	Woman-hill	40		Mrs. Keith
Ditto	68	Iaac Allan's wife	22	Windmill-brae	41		Mrs. Emflic

When taken ill.	No.	Name.	Age.	Residence.	Cured	Dead.	By whom delivered.
1792. January	69	Mrs. White	30	Printfield			Mrs. Keith
Ditto	70	Mrs. Byrn	27	Broadgate	42	5th day	Mrs. Philp
Ditto	71	Christian Sangster	30	Green	43		Mrs. Ogilvie
February	72	Al. Sim's wife	27	Printfield	44		Mrs. Chalmers
Ditto	73	James Gordon's wife	28	Ditto	45		Dr. Gordon
Ditto	74	Mrs. Mather	26	Drum	46		—
March	75	Tho. Wallader's wife	36	Printfield	47		Mrs. Keith
Ditto	76	Mrs. Imlach	24	Pesly	48		Dr. Gordon
October	77	Anne Skinner	36	Gallowgate	49		Ditto

(21)

CASE

C A S E I.

JOHN LOW'S WIFE, *No. 15 in the Table.*

IN the afternoon of the 19th of August, 1790, John Low, miller at Justice-mills, came to my house, requesting me to go immediately to his wife, "who," he said, "had fevered after delivery, and was in great danger." I accordingly went, and found her in a dangerous situation; she complained of an acute pain in the lower part of the abdomen, attended with a very great degree of fever, the velocity of the pulse being at the rate of 140 strokes in a minute.

The disorder commenced with a violent rigor at six o'clock in the morning, being about 36 hours after delivery.

I had no difficulty in ascertaining the patient's disorder, having had previous opportunities of seeing it both in London, and in the course of my practice in Aberdeen, for this was the 15th case I had attended, since the epidemic.

epidemic began, though the first of which I kept a journal. And, in every respect, the disease answered the description of that known to practitioners by the appellation of the Puerperal Fever, a distemper which so frequently proves fatal to women in child-bed, baffling the skill of the most eminent physicians. As, therefore, I had so often seen the disease, I could not be puzzled in regard to the proper method of treatment; though, at the same time, I was well aware that I could by no means promise success.

I accordingly ordered bleeding to the quantity of sixteen ounces, the abdomen to be fomented, and a glyster to be given; and, at the same time, I ordered large quantities of diluting drink: I likewise directed an anodyne diaphoretic draught to be given at night, and a cooling laxative the ensuing morning.

On the 20th, when I visited the patient, I found the velocity of the pulse somewhat diminished, but no abatement of the other

C 4 symp-

symptoms, (the pain and tension of the abdomen remaining as before.)

The laxative given in the morning had the desired effect; the blood drawn exhibited a very thick inflammatory crust; the lochia were suppressed; the urine was scanty and voided with pain; when recent it was high coloured, but when allowed to stand for a short time, it became exceedingly turbid.

The fomentations were continued, and an opiate given in the evening.

On the 21st, when I visited her in the morning, I was happy to find that she had been pretty easy throughout the night, and had enjoyed some hours sleep. The pulse was 136. She was in a profuse sweat, which, I hoped, would prove critical, and, therefore, endeavoured to promote it by small doses of tartar emetic in the saline mixture. But I was sorry to find that I was disappointed in my expectation; for when I returned in the afternoon, I found that the sweat had disappeared, being succeeded by a diarrhoea.

The

The patient now complained of very great pain, and the swelling of the abdomen seemed to increase. I ordered an opiate in a large dose, and applied a blister to the abdomen.

On the 22d, I was sorry to find that the disease was making rapid progress, in spite of all the remedies employed; and as I perceived that the diarrhoea was not proving critical, (for the pain and tension were extended over the whole of the abdomen) and that the patient's strength was sinking; all hopes of recovery were now totally abandoned.

The patient's agony was now extremely great, and called loudly for relief; I, therefore, thought proper to administer opium both externally and internally, on purpose to mitigate pain, and if possible to procure rest.

I went early in the morning of the 23d to visit my distressed patient, and found that the storm was lulled into a calm. The friends received me with transports of joy, vainly thinking that the danger was over.

The

The patient, supposing herself perfectly well, asked my permission to rise; for she seemed to feel no pain, and suffered me to touch and press the abdomen, without shewing any signs of uneasiness; a proof that the parts were in a state of gangrene. For this sudden cessation of pain, in the Puerperal Fever, is a fatal symptom which announces the approach of death, and denotes that a mortification has taken place. The friends, ignorant of this circumstance, were quite overjoyed to see the patient so composed, after such excruciating pain. However, notwithstanding this composure and apparent ease, it was evident from the ghastly appearance of the countenance, from the tumefaction of the abdomen with the absence of pain, from the sunk state of her pulse, and from the coldness of the extremities, that death was not far off. Accordingly, in a few hours, the scene was closed.

On this occasion, my practice exposed me to the unmerited reproaches of the ignorant and illiterate. For, though I had given an unfavourable prognosis, and desired a consultation,

tation, early in the disease, yet that did not exculpate me, nor mitigate the severity of popular clamour. On this as well as on many other occasions, I found that scientific practice and popular opinion very seldom correspond.

W. Collins M.D. F.L.S.

According to a vulgar custom in this country, the women came from all quarters to see the patient, and to offer their advice. Several ladies likewise joined the crowd; and though they neither knew the nature, nor even the name of the disease, yet they gave their advice with great freedom! Some said it was wrong to bleed, others that it was improper to purge a patient in such a situation; some prescribed heating, and others astringent medicines, supposing the disease was what they call a weed improperly treated; and, seemingly actuated by other motives than the good of the patient, they proposed different practitioners, every one recommending her own favourite*.

* So minute a detail might perhaps have been omitted, but I have given it to shew the obstructions I met with in my practice.

To put an end to this unpleasant scene of discord and confusion, I called in Dr. Bannerman, a very respectable physician, and of great experience, whose opinion coincided with my own, both in regard to the nature of the disease, the treatment, and apparent danger.

We were both very solicitous for leave to inspect the abdomen after death, but the friends could not be prevailed upon to give their consent; however, from the foregoing detail of symptoms, it may be judged what was the state of the parts.

C A S E II.

ISABEL ALLAN, *No. 17.*

On the 24th of September, 1790, I was called to Isabel Allan, a married woman aged 36 years, who, about twenty-four hours after delivery, had been attacked with a violent rigor, which was succeeded by an acute pain in the lower part of the abdomen, especially in the right side, attended with a great degree of fever.

fever. She had been thirty hours ill when I was sent for. Before I saw her, the abdomen was considerably tumefied; her pulse was at the rate of 140, and hard; she likewise complained of sickness at the stomach, and vomited bile of a green colour. The lochia were suppressed, and the urine was high coloured. In short, she had all the symptoms of the Puerperal Fever.

I, therefore, ordered her to be freely bled, a purgative to be given; the application of fomentations to the abdomen, and an anodyne diaphoretic draught at night.

When I saw her, on the morning of the 25th, I was happy to find her, to appearance, much better; her pulse was now only 124, the pain of the abdomen was much abated, and she was in a profuse sweat, which I endeavoured to promote, by giving emetic tartar in small doses. But, in the evening, I was sorry to learn that there had been a return of the rigor, which lasted long, and was followed by a considerable increase

crease of fever, with a very pungent pain, and tension of the abdomen.

I did not think it prudent to venture with a second bleeding, but I ordered a large blister to be applied to the abdomen, and a cooling purgative to be taken in the morning.

Next morning, when I visited her, I was concerned to find that all the symptoms were worse; the pain and swelling of the abdomen were increased, and the pulse was at the rate of 160. But I had not much reason to be surprised at this, as none of my orders had been obeyed. I, therefore, considered the case as hopeless. The miserable patient struggled for twenty-four hours, when she died, being the fifth day of the disease.

DISSECTION.

Leave being given to inspect the abdomen, I went on that business on the evening of the 28th, attended by Mr. Harvey, Mr. John Gordon, and Mr. Joseph M'Rae.

Upon

Upon opening the abdomen, I found the peritonæum and its productions the omentum, mesentery, and mesocolon, in a state of inflammation. The omentum had lost about half its substance by suppuration; the mesentery and mesocolon, and that part of the intestinal canal, with which they are connected, were very much inflamed. But the disease appeared more especially to occupy the right side; the right ovarium had come to a suppuration; the colon, from its caput along the course of the ascending arch, was much inflamed, and beginning to run into gangrene. A large quantity of pus and extravasated serum appeared in the cavity of the abdomen, which, when taken out and measured, amounted to two English pints. The peritonæal coat of the uterus was inflamed, and the organ itself not so compact and contracted as it ought to have been. Upon opening it, its cavity was found covered with a black-coloured substance, which at first sight had the appearance of mortification, but when wiped off, was found to be, nothing else than the membrana decidua, in the state in which it naturally is about this time.

CASE

C A S E III.

JANET ANDERSON, *No.* 37.

Janet Anderson, a Dispensary patient aged twenty-five years, after an easy labour was brought to bed of a living child on the 3d of December 1790, and had no complaint till the 4th, when about five o'clock in the afternoon, the Puerperal Fever made its attack, with a very long and violent rigor, and I was immediately sent for.

Before I saw the patient, the cold stage was over and the hot commenced, the pulse was at the rate of 128, and hard. I ordered immediate bleeding; but before the gentleman could be got who was to perform the operation, about an hour elapsed, and, what is very remarkable, the pulse, in that short space, rose from 128 to 140! a striking proof of the rapid progress of the disease.

I ordered her to be largely bled, but, before the intended quantity was taken away,

the patient fainted, and, for that reason, the operator thought proper to desist. After the bleeding a purgative was given.

The next morning, I was happy to hear that she had enjoyed a pretty good night's repose, though I was a good deal disappointed to be informed, that the purgative had not answered my wishes. The blood had a thick inflammatory crust ; she complained much of her belly, and her pulse continued at the rate of 140, and the lochia still continued to flow in moderate quantity.

The feebleness of the pulse deterred me from repeating the bleeding : the next design, therefore, was to excite a diarrhœa, and to endeavour to determine to the skin by sudorifics. In order to answer these intentions, I prescribed the powder of jalap in the saline mixture, to be given at proper intervals, till it answered the end. When I returned in the evening, I was informed, that she had slept a good deal throughout the day, and that the purging medicine had produced two or three

D motions.

motions. I ordered the same medicine to be continued.

On the 5th when I visited her, I was informed, that she had enjoyed a pretty good night's rest; the medicine had procured some stools, but not so many as I could have wished; the pulse was about 136; the pain of the abdomen was not exquisite, and chiefly confined to the right side.

In the evening when I returned, I was happy to find the patient in a gentle diaphoresis, which extended over the whole body, and I was in great hopes that it would prove critical; but I was unhappily disappointed, for next day, being the fourth from the attack of the disease, I was sorry to find, that all the symptoms were aggravated. The diaphoresis had continued for a short time only, and she had a bad and a restless night. The pain in the side was now very exquisite, and the abdomen tumefied; there was likewise a great difficulty of breathing, and oppression about the præcordia; the velocity of the pulse was

greatly augmented; the tongue very white; the thirst great; the lochia were now suppressed, and the patient began to be delirious.

These alarming symptoms induced me to avail myself of the assistance of another practitioner; I therefore thought proper to call in Dr. Skene, who readily accompanied me to the patient, and, with his approbation, a blister was applied to the side affected, the laxative medicine was continued, and an anodyne diaphoretic draught given at night.

On the 7th, being the fifth day of the disease, I found an increase of all the unfavourable symptoms; the pain and tumefaction of the abdomen were greatly increased, as was also the difficulty of breathing. A plentiful diarrhoea now came on; but it was too late, for nature, unhappily, was refractory, at the time when her efforts were likely to have been of service.

In the evening when I visited her, there was every sign of approaching death; the

pulse was sunk, and the extremities cold; and, in a few hours, the scene was closed.

DISSECTION.

Many arguments were ineffectually used to persuade the friends to permit an inspection. However, at last very unexpectedly, they gave their consent, and this circumstance obliged me to go on that business, at a very late hour, attended only by my principal pupil Mr. Harvey, who always accompanied me on such occasions. I was sorry that the lateness of the hour deprived me of the pleasure of Dr. Skene's company, whose presence is desirable on these occasions, on account of his anatomical knowledge.

When the abdomen was opened, the omentum presented itself perfectly entire, and very little diseased, only somewhat more of a red colour than it is in a natural state; the stomach was found, but all the intestines were much inflamed, and distended with air, particularly the colon. The left ovary was found,

found, but the right was almost totally wasted by suppuration. There was about half a pint of pus and extravasated serum in the cavity of the abdomen. The uterus was lying above the brim of the pelvis, and was considerably more enlarged, and distended, than it ought to have been. Upon cutting into it, its internal surface exhibited the same appearances already mentioned, in the case of Isabel Allan.

The lateness of the hour prevented me from proceeding to the dissection of the thorax; and I was the less solicitous about the matter, as I had seen in the abdomen the cause of the patient's death.

C A S E IV.

Mrs. ———, No. 38.

This lady thought herself secure because she was to be delivered by me, and I shall ever regret that her expectations were disappointed.

She had an easy labour, and remained perfectly

fectly well till the day after delivery, when about five o'clock in the afternoon, she was seized with a shivering fit, which lasted long, and was succeeded by a very quick pulse, and an acute pain in the right side of the abdomen.

I was sent for soon after the attack, and found the pulse at the rate of 140 ; I ordered sixteen ounces of blood to be taken away, and a purgative to be given, which unhappily failed to operate.

Next morning, I called in Dr. Bannerman, a very skilful physician, and we agreed to repeat the bleeding to ten ounces, and to administer Dr. James's powder, which, in a short time, produced five or six plentiful motions, by which the patient was greatly relieved.

In the evening, we were joined by Dr. Skene, a physician of great experience, who proposed to discontinue the purging plan, and to substitute sudorifics in its place. This, though a deviation from my usual practice, I did

did not oppose, because it was the proposal of a senior physician.

On the third day, in the morning, there was a remission, but, in the afternoon, the fever returned with greater violence than before, and the event of the disease was now too evident. Accordingly, the remainder of life was one continued conflict, painful to the patient, and distressing to the spectators.

A large blister was applied to the abdomen, which, instead of doing service, seemed rather to aggravate the patient's distress by the irritation it produced. Alarming symptoms seemed to increase every hour; the intellectual faculties began to suffer by a temporary delirium: convulsions were frequently interposed; the pulse became weaker and weaker, till, at last, it ceased altogether; the extremities grew cold; the sight failed, and death closed the melancholy scene,

DISSECTION.

This afforded a lamentable proof of the im-

perfection of our art ; for we had the mortification to find, that we had almost conquered the disease, and lost our patient for want of courage to carry evacuations to a proper extent. For, there was but a slight degree of inflammation, and no inflation of the intestines ; the right ovarium was enlarged to the size of a hen's egg, and was approaching to a state of suppuration ; there was but little extravasation in the cavity of the abdomen, and what there was seemed to have proceeded from the inflamed ovarium. And, I am fully persuaded, that, if we had carried our remedies to a greater extent, the life of the patient would have been thereby saved. If either the quantity of blood, which was taken away at the two bleedings, had been taken at the first bleeding, or the purging been continued, which was exchanged for sweating, I am thoroughly convinced we should have been able completely to overcome the disease.

This was the opinion which I formed from the dissection, and its truth was confirmed by my success in all the succeeding cases, to which I was called.

Thus,

Thus, the loss of this patient was the means of saving many others.

C A S E V.

JANET CORMACK, No. 44.

On the 1st of March 1791, I was called to Janet Cormack, a married woman aged twenty-five years, and found her in imminent danger; for, on the second day after delivery, the Puerperal Fever made its attack with a very violent rigor, or cold stage.

She had been five days ill before I was sent for. When I saw her, I found the abdomen tumefied, and very painful to the touch; the patient's strength was much exhausted, and her pulse so much sunk, that I did not think it possible for her to survive many hours.

In such circumstances, there was scarce ground for any indication, or rational method of cure; I, therefore, called in Dr. Skene to have his opinion, whose sentiments corresponded with my own; for we were both of opinion

opinion that her case was hopeless. However, we thought proper to give an opiate in a large dose, on purpose to mitigate pain. But what was given as a palliative, very unexpectedly proved a cure; for it both procured rest and produced a copious sweat, and the patient, next morning, was greatly relieved. A plentiful sweat continued for several days, and the pulse became less frequent,

Care was taken to keep the bowels open, and to procure rest by opiates, and I was now in hopes that nature would perform a cure. However, she still remained in a very precarious state, for the fever never entirely left her. The tumour of the belly was at the same time large and hard, so that there could be no doubt of internal suppuration. Little hopes, therefore, could be entertained of the patient's recovery. But, about a month after the attack of the disease, nature, by a wonderful and an astonishing effort, relieved the distressed patient, by an aperture at the umbilicus, through which a very large quantity of purulent matter was discharged, which continued to flow, for the space of three weeks, when

when the tumor subsided, and the orifice closed.

The patient soon after began to menstruate, and, in a little time, recovered more strength than could have been well expected.

Thus, we have a very singular and uncommon termination of a very dangerous and deplorable case, which shews the wonderful powers of nature, and what she is capable of performing, even in the most desperate and hopeless cases.

And, what is equally remarkable, the first case of Puerperal Fever, which I had an opportunity of seeing in Aberdeen, terminated in the same extraordinary manner, though I was called early, and notwithstanding bleeding and other evacuations were carried to a great extent.

So curious a case deserves to be described, and the history thereof is accordingly subjoined.

CASE

C A S E VI.

THOMAS M'ROBERT'S WIFE.

(Not in the Table.)

In November 1788, I was called to the wife of Thomas M'Robert, in Belmont-street, whose labour was attended with difficulty, owing to the presentation of the face; however, the child was expelled by the action of the uterus, and great care was taken to guard the perinæum.

The woman had no complaint till the second day after delivery, when I was called to her at midnight; her husband being alarmed, on account of a very long and severe shivering, with which his wife had been seized.

When I went to the patient I found her labouring under a great degree of fever, attended with a violent pain in the abdomen. She likewise complained of great sickness, and frequently vomited bile of a green colour; which

which symptoms clearly ascertained the nature of the disease.

I immediately bled the patient to the amount of sixteen ounces, and ordered a cooling purgative to be taken in the morning.

When I visited her next forenoon, I found no abatement of the disease; I, therefore, prescribed a repetition of the bleeding to ten ounces, and ordered the application of fomentations to the abdomen.

The lochia, which continued till now, were suppressed, the urine was scanty, high coloured, and passed with pain; I therefore ordered an infusion of lintseed for drink, and nitre with crystals of tartar to be given in pretty large doses.

On the third day, there was a remission, and, on the fifth, a complete termination of the fever.

The crisis was by a diarrhoea, accompanied with an erysipelas of one of the arms.

Dr.

Dr. Bannerman was a witness of the treatment employed in this case.

About ten days after I had taken my leave of this patient, I was called to her again, on account of a violent pain in the abdomen, accompanied with swelling and tension.

The pain was very excruciating, and was described by the patient, as similar to those shooting pains attending inflammatory tumors, which are approaching to suppuration.

These symptoms left no room to doubt, that the disorder was the consequence of the Puerperal Fever, and that there was an internal suppuration. Every application was employed which had a tendency to mitigate pain, and alleviate the distress of the sufferer, till nature brought relief in the same extraordinary manner, and by the same wonderful means already mentioned, in the case of Janet Cormack. For, about six weeks after delivery, to the great relief of the patient, an outlet was made for the matter through the umbilicus. The discharge continued for several weeks, till the whole
was

was exhausted, when the orifice closed. The patient again recovered perfect health, and has since been several times pregnant.

C A S E VII.

ISAAC ALLAN'S WIFE, No. 68.

This case terminated in a similar manner with the two cases just described.

The disease attacked the patient on the eighth day from delivery, after she had been employed in washing clothes, and began with a cold stage, to which succeeded fever and pain of the abdomen.

She had neglected to have recourse to any medical assistance at the beginning of the disease; but the pain at last became so excruciating, that she was under the necessity of sending for me. When I was called, I perceived that it was too late to attempt a cure by evacuation, and that all that art could do was to mitigate pain, and palliate the patient's sufferings.

sufferings by opiates, which were given in large doses.

The abdomen was swelled, and painful to the touch, and the poor woman's agony was very great, for the space of two months; when the disease came to a crisis, by a discharge of purulent matter from the urethra, after which the pain and swelling of the abdomen subsided. Purulent matter continued to be discharged by this outlet, for the space of a month, when it stopped, and the woman recovered strength sufficient to enable her to nurse her child, and she is now in perfect health.

The few foregoing Cases may be said to contain the whole, for the history of all the rest is comprehended in them.

No. 18, 24, 25, 26, 27, 36, and 64 had symptoms similar to the case first described, with this difference only, that in them the bowels were costive, and, for several hours before

before death, they vomited a matter resembling the grounds of coffee; whereas she vomited none, but had a diarrhoea, with stools not unlike moss-water. And most of the other cases, which I attended, may be referred to one or other of those above described, and are, therefore, properly omitted.

C H A P. III.

NATURE AND SEAT OF THE DISEASE.

THESE have been subjects of great dispute among writers on the Puerperal Fever. And I hope, that the observations, which an extensive experience has enabled me to make, will serve to illustrate the points in dispute. This I shall attempt, to the best of my ability, wishing to avoid all controversy, to which I have a great aversion; for I am fully persuaded, that if practitioners had observed more and reasoned less, there would have been little dispute, either about the nature or seat of this disease.

NATURE OF THE DISEASE.

This is a point much disputed; for some maintain, that the Puerperal Fever is a disease
of

of an inflammatory, while others as strenuously contend, that it is of a putrid nature. And I am very solicitous to establish this point, because it is a matter of the utmost moment, and has a direct and an immediate influence on the method of treatment; for inflammatory and putrid diseases are supposed to require remedies altogether different, and diametrically opposite.

Some, in my opinion, guided more by theory than observation, have endeavoured to settle the dispute by reasoning. But, to shew how precarious reasoning is, and how little to be trusted, I think proper to mention, that the arguments employed by others, to prove that the Puerperal Fever is a putrid disease, appear to me, rather to prove that it is inflammatory. Since, therefore, different conclusions may be drawn from the same premises, no opinion, concerning the nature of a disease, is of great weight, which does not rest on a better foundation than that of reasoning.

Were I disposed to reason, *à priori*, concerning

cerning the nature of the Puerperal Fever, I would do it in the following manner.

Since the state of child-bed is the conclusion of a great process, which begins with conception and ends with labour, and since an inflammatory disposition of body attends the whole process, from beginning to end; is it reasonable to think that there would be an immediate transition, a sudden change, from inflammatory to putrid, at the close of the process? It is surely much more natural to think, that the same disposition will be continued, and that the commotion excited by labour, and the cordials, so commonly given on that occasion, will rather increase than change the inflammatory state.

But there is no argument like matter of fact; I shall, therefore, relinquish reasoning, and have recourse to facts. And the doctrine, which I propose to deliver, concerning the nature of the Puerperal Fever, shall be grounded on the cases which I saw, and the dissections which I made.

The foregoing table contains seventy-seven cases of the disease, which are the foundation on which my doctrine is grounded, and which I defy any theory to shake.

Of that number forty-nine patients recovered, and twenty-eight died.

Of the former, the greater part owed their recovery to such evacuations, as cure inflammatory diseases, carried to a very great extent ; some, to the same evacuations spontaneously excited, and continued ; some, to a translocation of the inflammation to the extremities, or other external parts, in form of erysipelas or abscess ; and a few, to an astonishing effort of nature, in discharging the abdominal suppuration by an external outlet, of which wonderful crisis, I have given three remarkable cases.

Of the latter, or those who died, we have ocular demonstration of the nature of the disease in three dissections ; and, in all the rest, there were evident symptoms, either of

mortification, or suppuration of the parts contained within the cavity of the abdomen.

And if to these facts be joined this additional one, that of those who got wine and cordials, upon the supposition that the disease was putrid, none recovered, it may be considered as an established truth, that the Puerperal Fever is a disease of an inflammatory nature.

That it frequently puts on a putrid appearance in its progress, or in the advanced stages, I by no means refuse to admit; but observe, that this putrescency is only the effect, or consequence, of previous inflammation neglected, or improperly treated. For, in the course of the disease, considerable extravasation takes place into the cavity of the abdomen; and the matter thus extravasated, by stagnation, must soon acquire an acrid and putrescent quality, and, being absorbed, will occasion putrid symptoms. And this explains, why the Puerperal Fever puts on a putrid appearance, and accounts for the many mistakes of physicians,

ficians, with respect to its nature, who have taken the effects, or consequence, for the cause, and confounded the different stages of the disease.

But the Puerperal Fever is putrid in its progress only, and not in the beginning; and such putrescency is the effect, or consequence, of previous inflammation; for, when the disease is properly treated at the commencement, or soon after the attack, that is, at the beginning of the inflammatory stage, no symptoms of putrescency ever appear.

Having proved that the Puerperal Fever is an inflammatory disease, I shall next endeavour to investigate the specific nature of the inflammation, or inquire, whether it be of the nature of Phlegmon, or Erysipelas?

That the Puerperal Fever is of the nature of erysipelas, was supposed by Peautau forty years ago, and has been the opinion of Doctors Young and Home, of Edinburgh, since that time. I will not venture positively to assert, that the Puerperal Fever and Erysipelas

are precisely of the same specific nature ; but that they are connected, that there is an analogy between them, and that they are concomitant epidemics, I have unquestionable proofs. For these two epidemics began in Aberdeen at the same time, and afterwards kept pace together ; they both arrived at their *acmè* together, and they both ceased at the same time.

That the erysipelas accompanied the epidemic disease of lying-in women, of the years 1787 and 1788, described by Dr. Clarke of London, appears from the following words :
 “ Inflammatory diseases have been extremely
 “ unfrequent, or, if they have occurred, they
 “ have been principally of the erysipelatous
 “ kind *.”

The analogy of the Puerperal Fever with Erysipelas, will explain why it always seizes women after, and not before delivery. For, at the time when the erysipelas was epidemic,

* See Dr. Clarke on the Epidemic Diseases of Lying-in Women, p. 11.

almost every person, admitted into the hospital of this place, with a wound, was, soon after his admission, seized with erysipelas in the vicinity of the wound. The same consequence followed the operations of surgery : and the cause is obvious ; for the infectious matter, which produces erysipelas, was, at that time, readily absorbed by the lymphatics, which were then open to receive it.

Just so with respect to the Puerperal Fever ; women escape it till after delivery, for, till that time, there is no inlet open to receive the infectious matter which produces the disease. But, after delivery, the matter is readily and copiously admitted by the numerous patulous orifices, which are open to imbibe it, by the separation of the placenta from the uterus.

And thus, a question, which has given rise to various speculations and conjectures, is solved, in a very simple and satisfactory manner.

The connexion of the two diseases is still

8 further

further confirmed by the great extent of the inflammation, and rapid progress of the disease.

And the same connexion is evident from this circumstance, that a very frequent crisis of the disease is by an external erysipelas; which is a proof that there is a metastasis, or translation, of the inflammation, from the internal to the external parts *.

From these facts the reader may draw his own conclusion concerning the nature of puerperal inflammation. At the same time, I am aware, that this investigation will afford argument against the treatment recommended in the sequel, to those who have been taught,

* This critical erysipelas most commonly fixed on the extremities, but, in a few instances, on the external surface of the abdomen, which happened in a case of Puerperal Fever which I attended in the year 1788. The case alluded to is the wife of William Walker at Newbridge, whom I attended, at the same time with Thomas M^rRobert's wife, whose history is given in Case VI. In both cases the crisis was by an erysipelas, which, in the latter, fixed on one of the upper extremities, and in the former, on the integuments of the abdomen.

I

that

that bleeding and purging are improper in erysipelas, and that it is most successfully treated by cordials and tonic medicines. This is the doctrine taught at present in some of our schools, and will of course be adopted by many young practitioners.

But I combat opinions on the certain ground of practice, and not on the uncertain ground of theory; for which reason, the highest authority upon earth could not persuade me to admit a doctrine, which disagrees with my own experience. And, therefore, I shall only briefly observe, that if such practitioners had lived in Aberdeen, during the epidemic season, and seen the success of bleeding and purging, and the fatal consequences which followed the exhibition of wine and cordials, in erysipelas, they must have altered their sentiments, or disbelieved their own eyes.

Having investigated the nature of the Puerperal Fever, I next proceed to inquire into the

SEAT OF THE DISEASE.

With respect to the seat of the Puerperal Fever, writers have differed very much.

That the omentum is the seat of the disease is a supposed discovery, the merit of which has been claimed by two different authors *, each of whom has asserted his right to that honour.

It is indeed very true, that the omentum is affected in the Puerperal Fever; but it does not appear to be more especially affected than the other productions of the peritonæum, which are all equally and indiscriminately affected.

The dissections which I made prove, that the Puerperal Fever is a disease which principally affects the peritonæum and its productions, and the ovaria.

The peritonæum, or investing membrane

* Doctors Hulme and Leake.

of the abdomen, was inflamed ; and the extensions, or productions, of the same membrane, which constitute the omentum, mesentery, and peritonæal coat of the intestines, were all promiscuously affected.

In all the subjects which I dissected, the right ovarium was diseased, and the left found. Now it may be asked, was this accidental, or was there some other reason for it ? I observed, that in all the three cases, that ovarium was affected, in which impregnation had taken place.

Does the disease universally fix upon that ovarium in which conception had taken place, or is the right ovarium more commonly affected than the left, from some cause not yet discovered ?

I would therefore recommend this matter to the observation of future dissectors.

Thus I have proved that the Puerperal Fever is an inflammatory disease, and that its seat is in the abdomen ; it may, therefore, be considered as consisting in abdominal inflammation.

CHAP. IV.

CAUSE OF THE DISEASE.

VARIOUS causes have been assigned by writers for the production of the Puerperal Fever. I am unwilling to repeat the observations of authors, which are, or ought to be, in the hands of every practitioner, who pretends to female practice.

I shall, therefore, take no notice of the numerous causes mentioned by authors, but proceed to investigate the cause of the epidemic Puerperal Fever under consideration.

That the cause of this disease was a specific contagion, or infection, I have unquestionable proof.

When the Puerperal Fever is frequent and fatal, that is, when it prevails as an epidemic, its cause has been referred to a noxious constitution of the atmosphere*.

* See Leake on the Puerperal Fever, p. 97.

But

But that the cause of the epidemic Puerperal Fever under consideration was not owing to a noxious constitution of the atmosphere, I had sufficient evidence ; for, if it had been owing to that cause, it would have seized women in a more promiscuous and indiscriminate manner. But this disease seized such women only, as were visited, or delivered, by a practitioner, or taken care of by a nurse, who had previously attended patients affected with the disease.

In short, I had evident proofs of its infectious nature, and that the infection was as readily communicated as that of the small-pox, or measles, and operated more speedily than any other infection, with which I am acquainted.

With respect to the physical qualities of the infection, I have not been able to make any discovery ; but I had evident proofs that every person, who had been with a patient in the Puerperal Fever, became charged with an atmosphere of infection, which was communicated to every pregnant woman, who
happened

happened to come within its sphere. This is not an assertion, but a fact, admitting of demonstration, as may be seen by a perusal of the foregoing table.

The midwife, who delivered No. 1. in the table, carried the infection to No. 2, the next woman whom she delivered. The physician, who attended No. 1 and 2, carried the infection to No. 5 and 6, who were delivered by him, and to many others. The midwife, who delivered No. 3, carried the infection to No. 4 ; from No. 24 to No. 25, 26, and, successively, to every woman whom she delivered. The same thing is true of many others, too tedious to be enumerated.

It is a disagreeable declaration for me to mention, that I myself was the means of carrying the infection to a great number of women. But, happily, before I knew that the disease was infectious, I had discovered a remedy which would certainly cure it, if early applied. This discovery was a consolation, which, in a great measure, compensated for the uneasiness which the knowledge of the
above-

above-mentioned fact would have otherwise occasioned.

The midwife, who delivered Mrs. K——, carried the infection to No. 55 in Nigg, a country parish not far from Aberdeen, from whom it spread through the whole parish.

The servant of Sir William Forbes, Bart. carried the infection from his sister in Aberdeen to his wife in the parish of Fintray, six miles from town ; and the midwife, who delivered her, infected two others in the same parish soon after, both of whom died.

The midwives from Aberdeen carried the infection to the Printfield, or great cotton-works, two miles from town, where a great number of lying-in women was affected ; while, at the same time, the women in the neighbourhood, who were delivered by country midwives, escaped.

The infection was carried by practitioners of midwifery from Aberdeen to Gilcomston, and the Hardgate, villages in the suburbs of
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the city ; while women in the adjacent country, who were delivered by midwives on the spot, escaped.

Now it may seem remarkable, that the Puerperal Fever should prevail in the new town, and not in the old town of Aberdeen, which is only a mile distant from the former ; that it should prevail at the Printfield, in Gilcomston, and the Hardgate, villages in the parish of the old town of Aberdeen, and not in the old town itself. But the mystery is explained, when I inform the reader, that the midwife, Mrs. Jeffries, who had all the practice of that town, was so very fortunate as not to fall in with the infection ; otherwise the women, whom she delivered, would have shared the fate of others.

Why it prevailed in the parish of Nigg and of Fintray, and not in the adjacent parishes, I have already explained.

These facts fully prove, that the cause of the Puerperal Fever, of which I treat, was a specific contagion, or infection, altogether unconnected

ected with a noxious constitution of the atmosphere.

That the infection, which produces the Puerperal Fever, is not a specific contagion, but of the same nature with synochus, or typhus, has been asserted by a late writer on the Puerperal Fever. This author says, "that the disorder is not one, *sui generis*, confined to in-lying women, but merely an unusual form of a very common disease, and is in reality no other than the common infectious fever, complicated with a more or less extensive inflammation of the peritonæum*."

"We look on the Puerperal Fever as a form of the common synochus or typhus†."

The cause of both is undoubtedly infection, but the two infections are of a very different nature. For the circumstance, which excites the infection of the Puerperal Fever, seems to

* Walsh on the Puerperal Fever, p. 13.

† Id. *ibid.* p. 23.

prevent typhus. The former always takes place after, and not before delivery; but the latter (if pregnant women are exposed to the infection) takes place before, and very seldom after delivery.

The public office, of which I have the charge, has afforded me an opportunity of attending an immense number of pregnant women affected with fevers occasioned by infection; and the result has been, abortion in the early part, and labour in the latter part of pregnancy. Which events, so far from proving fatal, for the most part brought the disease to an immediate termination, the flooding of abortion, and the lochia of child-bed proving critical.

But the contagion producing typhus, is not only of a different nature from that which produces the Puerperal Fever, but the diseases thereby occasioned have very different symptoms. The principal symptom of the Puerperal Fever is pain in the abdomen; whereas, the principal symptom of typhus is pain in the head, without any complaint in the abdomen.

The

The difference is well illustrated by a case in point related by Dr. Kirkland :

“ A young woman very lately had, as I
 “ was informed, an extreme good time of her
 “ first child ; but she was unfortunately put
 “ into a bed out of which her sister, my pa-
 “ tient, was removed, who had long lain ill
 “ of a slow nervous fever. If we except her
 “ not having a stool, she went on very well
 “ for five or six days, the lochia being pro-
 “ perly discharged ; she slept well, and her
 “ breasts were filled with milk : but about the
 “ conclusion of this period, probably when
 “ the miasma received from the curtains and
 “ bed-clothes began to take effect, she com-
 “ plained of a pain in her head, was feverish,
 “ and her fever increasing with want of
 “ sleep, I was desired to see her on the eighth
 “ day of her lying-in. I then found her in a
 “ hot sweat, with an excessive quick weak
 “ pulse, and exactly the same kind of symp-
 “ toms which accompanied her sister’s fever.
 “ A clyster was immediately given with good
 “ effect ; other remedies were ordered, and her
 “ breasts had been, and still continued to be

“ carefully drawn, till they became flaccid
 “ from milk not being secreted : but the pa-
 “ rents of this woman, having lost another
 “ daughter in child-bed, were firmly persuad-
 “ ed that this would die also. Thus she con-
 “ tinued in the same bed, remedies were en-
 “ tirely neglected, she soon became delirious,
 “ and did die on the twelfth day from her de-
 “ livery ; but she had neither diarrhœa, pain,
 “ soreness, or swelling in any part of the ab-
 “ domen, &c*.”

* Dr. Kirkland on Child-bed Fevers, Case XVI.

C H A P. V.

PROGNOSIS OF THE DISEASE.

IN so dangerous a disease the prognosis must be precarious, and for the most part unfavourable ; for of all acute diseases, the Plague excepted, the Puerperal Fever is perhaps the most dangerous.

Indeed, one of the best writers on the Puerperal Fever has represented it to be as destructive as the Plague itself.

“ The Pestilence,” he says, “ like a fierce
 “ and untamed enemy, spreads his hostile banners in open day, and feasts on carnage and
 “ destruction, till, glutted with slaughter, he
 “ himself sinks down and dies ! But the Puerperal Fever, like a secret revengeful foe,
 “ stabs in the dark to the very vitals ; and
 “ though he kills one only at a time, yet he
 “ is privately slaying every day, and never
 F 4 “ fatiated ;

“ fatiated ; thus making up by length of
 “ time, what the other does by a sudden de-
 “ vastation *.”

The celebrated Dr. Hunter gives a very unfavourable account of the event of the Puerperal Fever. And, by the same gentleman, we have a melancholy history of its fatality in one of the lying-in hospitals in London ; for in that hospital, in the space of two months, thirty-two patients were affected with it, and only one of that number recovered.

In 1746, at Paris, none recovered.

According to Dr. Leake, thirteen patients out of nineteen died of this distemper, during the epidemic season †.

And, according to Dr. Young, all the women died, who were affected with this disease in the lying-in ward at Edinburgh, not one of them recovering.

* Hulme on the Puerperal Fever, p. 29.

† Leake on the Child-bed Fever, p. 246.

In my practice, of 77 women, who were attacked with the Puerperal Fever, 28 died ; so that very near two-thirds of my patients recovered, which proves that I have been much more successful than any other practitioner.

But it will be proper to mention that I was too late in being called to many of the cases, and that I had a fair trial only in fifty of the above number : of these fifty, only five died.

Nothing, therefore, can be a stronger proof of the truth of my doctrine, than the success of my practice ; for according to this account, if the cure be early attempted, and conducted according to the method which I propose, only one in ten will die, if we calculate according to my success in the above-mentioned fifty cases. And it deserves to be remarked, that all these five died before the third dissection, from which I discovered the certain method of curing the Puerperal Fever. The time, when the third dissection was made, may be reckoned the *Æra*, from which we are to date the discovery of the cure of this disease ;

case ; for, after that time, of thirty patients who were treated in the manner to be afterwards mentioned, not one died.

The course of the disease is pretty uniform, but in this there is some variation depending principally upon the time of attack ; for the earlier it begins after delivery, it will prove the sooner mortal ; and the later it seizes a patient, it will be the longer protracted.

Two died in the space of twenty-four hours after the attack ; one in thirty-six hours ; three on the third day of the disease ; fifteen on the fifth day ; three on the seventh ; three on the eleventh ; and one on the twenty-third.

Thus, more than one half of the deaths happened on the fifth day. The fifth, therefore, may be reckoned the principal of the fatal critical days, and it is likewise the principal critical day when the crisis is salutary. By attention to this circumstance, I was enabled to give a prognosis which frequently surprised the patient's friends ; for they were
astonished

astonished to find, that the event corresponded in point of time with my prediction.

The salutary symptoms are a diarrhoea coming on early, especially if the tumefaction of the abdomen be thereby diminished, the pain relieved, and the pulse rendered slower. Indeed it is so far a good symptom, that without a natural, or artificial diarrhoea, few or none recovered. A gentle moisture on the skin, a flow of milk to the breasts, a plentiful discharge of the lochia, are all favourable symptoms. It is likewise a favourable sign when the patient can turn herself; for, in dangerous cases, the patient generally lies in one posture, unable to turn herself in bed. But one of the most favourable symptoms is an erysipelas on the extremities, or abscesses on different parts of the body; for such are certain signs of a salutary crisis.

The dangerous, or unfavourable symptoms are, a very quick pulse; violent pain and tension of the abdomen; laborious respiration; a violent rigor, and the progress of
the

the disease very rapid ; a dry rough tongue ; delirium ; black vomiting ; black stools, and a circumscribed crimson colour on the cheeks. Cold clammy sweats on the face and breasts, involuntary stools, a fluttering pulse, and a cessation of pain, were the immediate harbingers of death.

C H A P. VI.

CURE OF THE DISEASE.

THERE is perhaps no disease in which less is done by nature, or more may be done by art. For though I have mentioned a few wonderful cures performed by nature, yet, in general, her efforts were ineffectual ; whereas when early recourse was had to the skilful assistance of art, the disease, in most instances, was very speedily and effectually cured.

And the method which I found most successful was, by copious bleeding, soon after the attack of the disease. But this did not answer the end unless it was performed early, and in large quantity. And what Botallus says of the Plague is strictly applicable to the Puerperal Fever. That author says,

“ Bleeding proves more beneficial than all
“ other

“ other remedies, provided it be seasonably
 “ used, in due quantity ; but I am of opinion
 “ it sometimes does no service, either because
 “ practitioners are too late in having recourse
 “ to it, or use it too sparingly, or commit some
 “ error in both these particulars. For if a
 “ disease, which requires four pounds of blood
 “ to be taken away in order to cure it, and
 “ only one is taken away, destroys the patient ;
 “ it does not prove destructive because bleed-
 “ ing was used, but because it was performed
 “ in an improper, and perhaps in an unsea-
 “ sonable manner *.”

Now, nothing can be more applicable to the
 Puerperal Fever than the observations of Bo-
 tallus ; for, when I took away only ten or
 twelve ounces of blood from my patient, she
 always died ; but when I had courage to take
 away twenty or twenty-four ounces, at one
 bleeding, in the beginning of the disease, the
 patient never failed to recover, as was the case
 with No. 23, 28, 33, 35, 36, 40, 41, 52, 53,

* Botallus, cap. 7. De curatione per sanguinis missionem.

54, 56, 58, 60, 61, 62, 67, 70, &c. in the foregoing table.

If therefore a practitioner is called to a patient in the beginning of the Puerperal Fever, he must never take away less than twenty or twenty-four ounces of blood at one bleeding, otherwise he will fail in curing the disease.

I know that this will be thought too large a quantity by those who never take away more than eight or ten ounces of blood from their patients ; but such practitioners would never cure the Puerperal Fever. For unless a practitioner venture to take away the quantity mentioned, it would be much more prudent in him not to bleed at all, because his patient will certainly die, and the bleeding will be blamed ; for among the vulgar and illiterate there is a strong prejudice against the practice of bleeding women in child-bed, it being a popular opinion, that bleeding stops the lochia, and proves certain destruction to every one that undergoes it.

And I felt this prejudice in its full force,
when

when I had not courage to take more than twelve, or fourteen, or even sixteen ounces of blood from my patients. But when I had resolution to take twenty or twenty-four ounces at one bleeding, I disregarded it, because I was sure that that quantity, taken away within six or eight hours after the attack, would certainly cure the disease, and that of course there would be no clamour against bleeding. But when I was not called at the beginning, or soon after the attack of the disease, when the success of bleeding was uncertain, I did not bleed at all.

In this manner, at last, I fairly got the better of a prejudice, which I thought invincible; for, when people saw, that all who were bled recovered, and that almost all, who were not bled, died, even those, who were most prejudiced against bleeding, were compelled to be silent. And thus, I had the satisfaction to see the voice of clamour effectually silenced.

But twenty or twenty-four ounces, which I have limited as the quantities requisite for the cure of the Puerperal Fever, will not be
thought

thought too large a bleeding, by such practitioners as have been accustomed to see the large quantities of blood, which pregnant women sometimes lose, with safety, in cases of flooding. In such cases, I have frequently seen women lose from two to upwards of four pounds of blood, in the space of a few hours : and yet these patients had good recoveries, and were the only women, delivered by me, who escaped the Puerperal Fever, in the epidemic season *.

Besides, the quantity of blood, necessary for the cure of the Puerperal Fever, is not near so

* Since this work was finished, I was called to the wife of Thomas Paterfon, in Gilcomston, who, at the commencement of labour, had lost four pounds of blood, before medical assistance was desired. Being engaged with a case of difficult labour, I sent Mr. Booth and Mr. Morgan, my pupils, on purpose to deliver her ; but she would not allow them to proceed, before I visited her. In the mean time, she lost about two pounds more. So that, before she was delivered, this woman lost six English pints of blood : and yet, notwithstanding this profuse hemorrhagy, in three weeks she was able to walk to my house, the distance of a mile, to return thanks, when she was perfectly recovered, and had a thriving infant on the breast !

G

great,

great, as that recommended by some practitioners of the first rank, for the cure of other diseases. Both Hippocrates and Galen bled very largely, when occasion required, the latter sometimes taking away six pounds of blood with manifest advantage; and he, and other ancient physicians, did not hesitate to bleed *ad deliquium* in fevers. The illustrious Sydenham says, that he has seldom known a confirmed pleurisy cured, in grown persons, without the loss of about forty ounces of blood; and both Cleghorn and Huxham used to take away a still greater quantity in the same disease. Dr. Cullen says, that a man of tolerable strength may lose from four to five pounds of blood, in the course of two or three days, for pneumonic inflammation.

Now, when I was called early to patients in the Puerperal Fever, and had courage to take away twenty-four ounces, at one bleeding, I never failed, at once, to cure the disease. No. 58, 60, 62, 70, 72, 75, and 77, are instances of the truth of this.

I was called to Elspet Robertson, No. 58,
a few

a few hours after the attack of the Puerperal Fever, which took place on the day after delivery. This patient complained of a very acute pain in the abdomen, which had succeeded a severe rigor, or shivering fit, and the pulse was at the rate of 160. She was bled to the extent of twenty-four ounces, and got a purgative at two o'clock in the afternoon immediately after the bleeding, which produced six or seven plentiful motions. And when I saw her, at eight o'clock in the evening, to my great surprise, the pulse had come down from 160 to 108, and the pain of the abdomen was gone. Next morning, when I called, I found her without fever, pain, or any other complaint.

I was called to Mrs. Thomson, No. 60, in similar circumstances. She was treated exactly in the same manner, and the same success attended the treatment.

An express came for me, one night, to go to the Printfield to Mrs. Forbes, No. 62, who had been seized with the Puerperal Fever, which made rapid progress, and was at-

tended with symptoms, which alarmed the patient's friends, and made them send for me. I dispatched Mr. John Gordon, and Mr. Joseph M'Rae, with instructions how to act; and they managed the case with great propriety, for, when they had taken away about twelve ounces of blood, the patient fainted: but the young gentlemen were not alarmed at that, but waited till she recovered, when they took away other twelve ounces; and, after the bleeding, they gave a brisk purgative, which operated well, producing ten or twelve plentiful motions.

When I visited the patient, next day, I found, that both the fever and pain of the abdomen were totally gone.

The attack of the Puerperal Fever, in this case, was on the day after delivery, in the afternoon, and she was bled, and got the purgative, within six or eight hours after the commencement of the disease.

Thus, I found that twenty-four ounces of blood, taken away at one bleeding, within six
or

or eight hours after the attack of the disease, together with a single purgative, never failed, at once, to cure the Puerperal Fever. But when a less quantity was taken away, I either failed in curing the disease, or could not accomplish a cure without a course of purging.

Next to bleeding, therefore, purging constitutes a principal part of the cure of the Puerperal Fever, and this is the outlet by which nature, when left to herself, attempts her own relief.

After bleeding, therefore, it was my practice to give some active purgative, on purpose to bring on a diarrhœa, which, when excited, I found necessary to continue through the whole course of the disease, till it was entirely conquered.

When the disease was early combated, and treated in the manner mentioned, I either cured it at once, or brought it to a remission on the third day. Now, this remission on the third day is very ready to impose upon inexperienced practitioners, inducing them to give

a favourable prognosis, and to desist from further purging, upon a supposition that the danger is over. But the event will convince them of their mistake ; for, unless the advantage thus gained be improved, by a continuation of purgatives, it will be found, that the remission is only a respite, during which, the disease is preparing strength to return again, in order to renew the conflict with redoubled vigour, when it will not be in the power of art to check its impetuosity. Like an enemy who retreats, on purpose to take the first opportunity of rallying on more advantageous ground, when the contest is renewed with tenfold fury.

The purging, therefore, is to be early excited, and to be continued without intermission, till there be a complete termination of the disease, which generally happens on the fifth day.

And here again new difficulties presented themselves ; for I met with as much opposition in regard to purging as bleeding, for popular opinion was as much against the one as the

other. I was, therefore, under the necessity of giving my purgatives in a concealed way. For some time, I gave powder of jalap, or syrupus de rhamno, in the proportions of a dram of the former, or two ounces of the latter, in six ounces of the saline mixture, of which the patient took an ounce at proper intervals. But this medicine I found to answer better for continuing, than for introducing the diarrhoea; for which reason, the preference was given to others which I found more effectual. And it is a matter of the utmost moment, to prescribe such purgatives as will operate with all possible speed. After trying a great variety, I found that most dependence was to be put in calomel and jalap; three grains of the former and two scruples of the latter were mixed with conserve of roses, and made into a bolus, which I always administered immediately after bleeding, without giving the least intimation of the intention of the medicine, either to the patient or her friends. This medicine commonly operated speedily and briskly, and never disappointed me, as other purgatives frequently did; and the diarrhoea, thus begun, was afterwards

continued by the purging mixture already mentioned, which was given, in such proportions, as to produce five or six motions every day, without intermission for the first three days of the disease ; after which I diminished the dose, but still continued the medicine, till the disease totally ceased. Every night, I administered an opiate, in order to give a respite to nature, and strength to the patient, to enable her to bear the evacuations, which she must necessarily undergo the ensuing day.

In this manner I treated my patients, and the same method, if followed by others, will, I am confident, be attended with equal success. It may, perhaps, be thought a severe method of cure, but I can affirm, from extensive experience, that no other method will cure the Puerperal Fever. The cure is severe, but it is only short, for the patient is cured in a few days, or not at all.

" Cita mors venit, aut victoria læta."

All the patients, who were early and largely bled, and plentifully purged, recovered. On the

the contrary, all died who were sparingly bled, and in whom we could not excite a diarrhœa in the beginning of the disease ; as in No. 1, 2, 3, 5, 6, 9, 17, 18, 19, 22, 24, 25, 26, 27, 32, 37, 38, 42, 43, 45, 55, of the cases in the foregoing table.

The propriety of purging, in the Puerperal Fever, was clearly pointed out to me by nature, in the case of Janet Wier, No. 11.

I was called to this patient, about twenty hours after she had been attacked with the Fever. She told me, that the disease began, the day after delivery, with a severe shivering. The abdomen was tumefied and painful to the touch ; but the pain was most severe in the right side ; her pulse was at the rate of 140, and hard. Sixteen ounces of blood were immediately taken away, which gave her great relief, and a purgative was also given. The blood had a thick inflammatory crust ; and the purgative operated well. The cure, which was begun by art, was carried on by nature ; for a diarrhœa continued without intermission for seventeen successive days, and

was

and was extremely violent, being at the rate of twenty or thirty stools every day. The violence of the diarrhœa made me endeavour to restrain it, but to no purpose. For nature, bent on conquest, and disdaining the impediments of art, seemed determined to continue her career, till she came off victorious. And, if it be admitted, that disease is a conflict of nature fighting for her safety, this was one of the warmest contests I ever had an opportunity of witnessing. I frequently thought that the patient was irrecoverably sunk, and ready to expire; but still she revived again, and the conflict was renewed. And, after an unparalleled struggle of seventeen days, the fever ceased, and the diarrhœa abated. But though the diarrhœa abated, it did not entirely cease; for it continued, though in moderation, for the space of six weeks; and having completely carried off the disease, it then ceased spontaneously. And what is very remarkable, after all she had milk in her breasts, and nursed her child, which she kept at the breast for the long period of fifteen months.

Bleeding and purging are the two great
hinges,

hinges, upon which the cure of the Puerperal Fever turns. Sweating is both uncertain and difficult to be excited; blisters seem rather to do hurt than good by the irritation they occasion; warm fomentations, which are so commonly used by practitioners, are of no great service, and when applied too hot they evidently increase the pain and quicken the velocity of the pulse. In short, the only proper method of curing the Puerperal Fever is, by large bleeding early in the disease, and plentiful purging, with the interposition of opiates.

But though bleeding be the principal, and most effectual of all remedies, yet its efficacy is limited to the beginning of the disease. However, I think that it may be successful, and ought to be tried at a later period than I could venture, on account of the prejudices of the people among whom I practised, which compelled me to be extremely circumspect.

After much experience in the disease, and mature deliberation concerning the conduct most proper to be pursued, in my peculiar situation, I came to the following resolution:

If

If called to a case within twelve hours after the attack, I insisted on bleeding the patient, and promised for its success ; but if at a later period, viz. from twelve to twenty-four hours after the attack, in that case, like Sydenham with the same remedy in the small-pox, I thought it incumbent on me to propose it as the only effectual remedy, but I neither insisted on it, nor promised for its success.

Purging, the other principal remedy for curing the Puerperal Fever, is not so circumscribed in its application as bleeding; for it is well adapted to all the different stages, or periods, of the disease, and is the evacuation to which nature herself gives the preference ; being the only proper critical, or salutary discharge, that takes place in the Puerperal Fever.

If the disease has been neglected, or improperly treated, in the beginning, the event is for the most part fatal ; for the inflammation continuing to increase, terminates in suppuration, or gangrene. At any rate, considerable extravasation takes place in the cavity of the
abdomen ;

abdomen ; and the disease, which was inflammatory in the beginning, becomes putrid in its progress.

In this stage of the disease most authors have recommended the use of tonic and antiseptic medicines ; but my experience authorises me to put little confidence in them. For the source of the poison is in the cavity of the abdomen, for which there is no antidote in the *materia medica*.

“ Dic, quibus in terris, et eris mihi magnus Apollo.”

This deep seated poison cannot be corrected, in any other way, than by being carried out of the body. But there is no direct outlet from the cavity of the abdomen, and the only channel is by a long circuit, or indirect course through the absorbents into the circulation, and out of the system by the common excretories. For the absorbents are capable of imbibing the extravasated poison, and carrying it into the system, from which it is most readily discharged by the intestinal canal. Now this method nature frequently attempts

attempts by exciting a diarrhoea, and the practitioner, in imitation of nature, must pursue the same intention, by giving purgatives, if a spontaneous diarrhoea has not taken place.

That nature sometimes succeeds in this way, we have a remarkable instance in the case of Janet Wier, already described.

Before I finish this chapter, I think proper to mention the event of this disease in the hands of those, who treated it with wine and cordials, without either bleeding or purging their patients. And I took particular notice that all the women died, who were attended by such practitioners. Yet their practice was praised, though it always failed, because it was pleasant, and corresponded with popular opinion: whereas my practice was blamed, though always successful, because my method of cure had the appearance of severity.

I wish the reader to take notice that I do not assert this on purpose, or in such a way as to injure the character of any individual; for I mention no name. But I consider it as a
sacred

-sacred duty, a matter of conscience, to mention every circumstance relating to the subject. And as the lives of thousands are at stake, the less apology is necessary. The maxim of every author ought to be the same with that of Aristotle, who says, "Plato is my friend, but truth much more." And, in this instance, I esteemed the men, though I disapproved of their practice.

I shall finish the chapter with observing, that though the cure turns upon bleeding, yet it is to be done *early* and *largely*, or not at all; that purging can never be omitted with impunity: and that, if any one neglect to excite an artificial, or venture to restrain a spontaneous diarrhoea, or give cordials early in the disease, he will certainly lose his patient.

C H A P. VII.

PREVENTION OF THE DISEASE.

CONSIDERING the many difficulties and the opposition which I met with in curing the Puerperal Fever, it will be readily believed, that I should be extremely solicitous to discover a preventive for the disease. And, though I was very diligent in this search, yet my endeavours were for a long time unsuccessful. For those means, which have been recommended by authors, were found altogether inadequate to the purpose. And, for this reason, I hope I shall be pardoned for considering them as the suggestions of theory, which will not stand the test of experience; my experience authorizing me to say, that those, who trust to them, will be greatly disappointed.

Those,

Those, who propose to prevent the Puerperal Fever, must have two intentions in view. The one is, to prevent the infection from being communicated ; and the other is, after the infection has been communicated, to prevent its action.

My endeavours were entirely directed to this last purpose ; for the Puerperal Fever had prevailed for some time, before I discovered that it was infectious : and after this discovery was made, I saw the danger of disclosing the fatal secret.

With respect to the most effectual means of preventing the infection from being communicated, I must speak with great uncertainty, because in this matter I have not experience for my guide. When treating of the cause, the nature, and cure of the disease, I spoke with the utmost confidence, because I had experience and facts for my guide ; but here those sure guides are wanting, and therefore I speak with diffidence.

Whether the infection of the Puerperal
H Fever

Fever is capable of being destroyed by the same means as that of other Fevers, I cannot affirm with certainty ; but think it very probable, and that they ought to be tried.

That fresh air and cleanliness are insufficient for the destruction of contagion, and that there is no certain antidote but fire and smoke, has been demonstrated by the ingenious Dr. Lind. This excellent author has proved, that fire and smoke are the most powerful agents for annihilating infection ; and, as he thinks, even the plague itself.

The methods which he recommends for the purification of infected chambers, and for the fumigation of infected apparel, may be seen by perusing his ingenious papers on fevers and infection, to which I refer the reader.

The same means ought to be practised, for preventing the infection of the Puerperal Fever. The patient's apparel and bed-clothes ought, either to be burnt, or thoroughly purified ; and the nurses and physicians, who have attended patients affected with the Puerperal
Fever,

Fever, ought carefully to wash themselves, and to get their apparel properly fumigated, before it be put on again.

So much with respect to the method of preventing the infection of the Puerperal Fever from being communicated. I shall next consider the means of preventing the action of that infection, after it has been communicated; and on this head I speak with proper confidence, because I speak from experience, the surest test of medical truth. And as I have already mentioned, I found myself disappointed when I trusted to those means, which have been recommended by some authors of considerable respectability. For, neither antiseptic nor tonic medicines, nor such as obviate sensibility, or irritability, were found effectual. Consequently, bark, wine, opium, &c. will disappoint those who put their confidence in them.

I found, likewise, that neither the greatest care, the best of management, nor the strictest attention to regimen, were sufficient to prevent it.

After many unsuccessful trials, I began to think, that those means which cured the Puerperal Fever would *à fortiori* prevent it. Bleeding, therefore, occurred to me as the most probable means of preventing the Puerperal Fever; but I was unwilling to have recourse to it as a preventive, because, if it failed, I was, by that means, deprived of the only certain remedy for the cure. And such was the prejudice against bleeding, that if I had used it as a preventive, and it had failed, I should not have been permitted to repeat the operation afterwards, at the attack of the disease, when it was indispensably necessary.

I was therefore compelled to rest contented with purging; and the purging bolus, which was so effectual in the cure, was equally efficacious as a preventive. This bolus was given the day after delivery, in the morning, and it either prevented the disease altogether, or answered this good purpose, that the cure was anticipated before the attack of the disease.

In short, all, who got the medicine, either escaped the disease, or were easily cured if they
 did

did not. Indeed, all, who got it, escaped, except James Davidson's wife, No. 52, who got the bolus the day after delivery, which purged her briskly ; but she was, notwithstanding, seized with the fever on the third day, about five o'clock in the afternoon. Being in the country, I did not see her till eight, when her pulse was 140, attended with the usual symptoms of pain in the abdomen, &c. The bolus was repeated, and twenty-four ounces of blood taken away, by which the disease was at once cured.

A P P E N D I X,
CONTAINING
P R A C T I C A L R E M A R K S
ON THE
P U E R P E R A L F E V E R.

THAT popular opinion and the doubts of many practitioners, with respect to the propriety of bleeding women in child-bed, are ill founded, I have proved in the preceding treatise.

This opinion seems to have arisen from an idea, that the system, after delivery, is in a state of inanition. But that the system on this occasion, so far from being in a state of inanition, is, on the contrary, in a plethoric state, must appear evident to every attentive
H 4 observer.

observer. For, during pregnancy, the menses are retained, and there is a great quantity of blood derived to the uterus, which, if not discharged after delivery, must be redundant, and occasion plethora. Now, in order to obviate this plethora, or superabundance of blood, nature, in her wisdom, has thought proper to excite the lochial discharge, and to determine to the breasts by the secretion of milk. And as, in the Puerperal Fever, the latter is frequently diminished, and the former wholly suppressed, these circumstances undoubtedly indicate, *à priori*, the propriety of bleeding. But it is unnecessary to reason upon a point, which is ascertained by experiment.

The propriety of bleeding in the Puerperal Fever being established, does it follow that it ought to be practised in every case?

This question is the more pertinent, because there are many rules and cautions laid down by practitioners on the subject; and a celebrated writer on this disease tells us, that
 “ there are some cases where bleeding is very
 “ necessary,

“ necessary, and others where it is highly im-
 “ proper *.”

Now, in my judgment, bleeding is proper in every case ; for, whenever the disease is distinctly marked, I hold bleeding to be indispensably necessary in every case, being decidedly of opinion, that it can never be omitted with impunity.

Bleeding I consider as proper in all cases, at the beginning of the disease ; and the indications for it are more urgent than in pneumonic inflammation, where its propriety has never been questioned.

And it is strange that there should be any doubts about the propriety of the same remedy in abdominal inflammation, which is much more dangerous than the other. For, in pneumonic inflammation, there is a direct outlet, whereby the matter can be discharged, supposing a suppuration to take place ; but there

* Hulme on the Puerperal Fever, p. 76.

is no direct outlet, whereby purulent matter can be discharged from the cavity of the abdomen. Consequently, bleeding is, *à fortiori*, much more pressingly indicated in the Puerperal Fever than even in pneumonic inflammation.

We are directed by Doctors Hulme and Leake to form our judgment from the pulse*. But I assert, in the most peremptory manner, that, if practitioners allow themselves to be guided by the pulse, they will run into a fatal error; because the pulse is more frequently weak and feeble, than strong and full, even at the beginning of the disease. Yet, I bled notwithstanding, with great success; and, contrary to what might have been expected, the pulse, instead of being thereby weakened, became more full and strong than before.

The conduct of practitioners must be governed by the stage of the disease, and not by the state of the pulse. And I have found

* Hulme on Puerperal Fever, p. 76. Leake on Puerperal Fever, p. 105.

Huxham's observation, with respect to the pulse in pneumonic inflammation, strictly true in the Puerperal Fever. "Pulsus enim haudquaquam in hoc morbo hujus satis fidus est index *." For when the pulse seems to sink in the beginning, that circumstance depends upon oppression, and not weakness, and, therefore, urgently requires bleeding.

Practitioners must beware of being imposed upon by the state of the pulse; for, as Dr. Leake has very properly observed, there is a great difference between nature oppressed and nature exhausted.

Bleeding must, therefore, be performed without regard to the state of the pulse, if the other circumstances of the case require it, and the stage of the disease admit it. The circumstances of the case which require it may be known, by the presence of those symptoms described in the sixth chapter, which are so unequivocal, that they can scarce be mistaken. The stage of the disease, which admits it, is likewise very explicitly described

* Huxham De Aere et Morb. Epidem. vol. ii. p. 67.

in the same chapter, where the reader will find it restricted to the beginning.

The propriety of bleeding being admitted, the quantity proper to be taken is a great desideratum in practice. This, though a matter of the utmost importance, has not been determined by writers; and I have attempted to supply this deficiency, in the preceding treatise. It is true, Doctors Denman and Leake have both recommended large bleeding in the Puerperal Fever: but the former has left the quantity undetermined; and though the latter in his writings has recommended copious bleeding, yet in practice we find him taking away only eight or ten ounces. It, therefore, by no means surprises me, that he lost so many patients; for, till I took away more than double that quantity, I had no better success than Dr. Leake. And Doctor Hulme has given us a precept in regard to this matter, which my experience authorizes me to reverse. The precept is, "rather to err in point of bleeding too little than of bleeding too much *." For, I am tho-

* Hulme on Puerperal Fever, p. 77.

roughly convinced from much experience, that there is far greater danger to be apprehended, from bleeding too little than from bleeding too much. The first error would be fatal, whereas the last would produce only a temporary weakness unattended with danger.

The quantity of blood, proper to be taken away in the Puerperal Fever, I have limited to twenty or twenty-four ounces. Now any woman of tolerable strength can very well bear the loss of twenty-four ounces of blood, and twenty ounces will not materially hurt even one that is weak. And I found, that all those, who were bled to that extent in the beginning of the disease, had speedy and perfect recoveries.

In short, my experience with respect to bleeding in the Puerperal Fever, corresponded with that of Cleghorn in pleurisy. "It was remarkable," says that author, "to observe how quickly the sick recovered their usual health and strength, notwithstanding the great loss of blood they had sustained; while many, who had been bled more sparingly,

“ingly, continued in a languid infirm state
“for months *.”

This was precisely the case in the Puerperal Fever, with this difference only, that those who were sparingly bled, instead of having slow recoveries, did not recover at all.

Besides, the quantity of blood, which I have limited as necessary for the cure of the Puerperal Fever, added to that lost by the lochial discharge, does not exceed the quantity directed by Sydenham for the cure of pleurisy, and falls short of that recommended by Huxham, Cleghorn and Cullen, for the same disease, and far short of the quantity taken away by Galen and the ancients in fevers.

I have been the more particular in regard to bleeding, because the propriety of it has been much questioned, and its promiscuous use highly censured by some practitioners.

“It is allowed that these fevers sometimes

* Cleghorn on the Epidemic Diseases of Minorca, p. 261.

“arise

“ arise even after large uterine effusions;
 “ ought we then to expect to cure a disorder
 “ by bleeding, which bleeding would not pre-
 “ vent ?” says one *.

“ It is an axiom in physic, that a remedy
 “ which cures any disorder, will always prove
 “ a prophylactic against it ; and therefore if
 “ bleeding were the proper cure in the Puer-
 “ peral Fever, the disease ought to have been
 “ prevented by a large evacuation of blood,
 “ when that happened previous to its seizure,”
 says another †.

Those gentlemen themselves know best, on
 what foundation their opinion is grounded ;
 but, for my part, I found, that large uterine
 effusions invariably prevented the epidemic
 Puerperal Fever, which I have described. For
 I was called to several cases of flooding in
 time of labour, and I observed, that those
 were the only women, delivered by me, who

* Mr. White on the Management of Pregnant and Lying-in Women, p. 219.

† Dr. Manning on Female Diseases, p. 371.

escaped

escaped the Puerperal Fever, in the epidemic season. This was too remarkable to escape my notice; and it may be easily accounted for.

The common lochial discharge does not prevent, but occasion it, by opening a channel for the infection to enter. But when the same discharge proceeds to a flooding, or when that has happened during labour, it obviates the effects of that infection, by preventing inflammation, which is the immediate consequence of such infection.

The circumstances, which seem to have deterred practitioners from bleeding, are, apprehension of putrefaction, and the dread of debility. But that such fears are groundless, I am warranted to assert from extensive experience. For those, who were bled most largely, had the most speedy and perfect recoveries; and as to putrescency, it never appeared, but when the disease had been neglected or improperly treated; for, as I have already observed, the Puerperal Fever is always inflammatory at the beginning, and becomes

comes putrid only in its progress. And, if we cure the inflammation by early bleeding and purging, we infallibly prevent the putrescency, because we prevent the abdominal suppuration, on which the putrid symptoms depend.

But the foregoing work treats only of the epidemic Puerperal Fever; and, it may be said, that the treatment proper for it is improper in the other sorts of that disease, of which there is a great variety, each of which will require a different method of cure.

In regard to this matter, I shall observe, that various causes may produce the Puerperal Fever, and that it differs in degree in different patients; but still it ought to be considered as the same inflammatory disease, differing only in the degree of inflammation. I am, therefore, of opinion that all the different varieties of the disease require, if not the same, at least a similar, method of treatment. For, though a few cases may be so mild as to require nothing more than purging, yet most are so violent as to be

manageable only by copious bleeding and purging, early in the disease. But, in all doubtful cases, it is better to use both, than to trust to one of these remedies.

I have seen several cases of Puerperal Fever arising from different causes, both before the commencement and since the cessation of the epidemic constitution; and I have invariably found that it was most successfully treated by the method recommended in chapter 6, viz. by bleeding and purging.

I have added one case to the table, though it occurred after the epidemic was at an end.

The cause of the Fever, in this case, was the application of putrid matter to the uterus from a foetus which had been retained for a considerable time after death, and was in a very corrupted state.

This patient was seized with a shivering fit, the third day after delivery, to which succeeded a violent pain in the abdomen, with

with a very quick pulse, which did not beat less than 140 strokes in a minute.

She was bled to the amount of twenty-four ounces, and got purging medicines, which were continued till the disease was brought to a crisis, which happened on the fifth day.

That putrid matter is capable of producing an inflammatory disease is a position, which, perhaps, will be questioned by many readers. Be that as it will, its truth is proved both by dissection and inoculation for the small-pox; for if matter be taken from the most malignant small-pox, and applied to the arm of a person who never had the disease; it produces inflammation in the part to which it is applied, and, afterwards, (provided the patient has been properly prepared) a distinct small-pox of the mildest kind.

And, if in the dissection of a putrid body, a surgeon scratch his finger, the part festers,

that is, inflames and suppurates; and if a fever should be the consequence, it is inflammatory in the beginning, and only ultimately putrid. And further, if such a fever be properly treated in the beginning, it never becomes putrid at all.

In like manner, if putrid matter be applied to the uterus, it inflames that organ and the contiguous viscera; that is, it gives rise to the Puerperal Fever, which is ushered in with a cold stage, and succeeded by a very rapid pulse and acute pain in the abdomen.

I have had an opportunity of seeing many cases of this kind, and all of them were successfully treated by bleeding and purging; the blood constantly exhibiting a very thick inflammatory crust, with other symptoms of inflammation.

We find the greatest variety of Puerperal Fever in Doctor Kirkland's Treatise on this Disease, and accordingly the treatment, which
varies

varies with the cause, is so complicated that it cannot fail to perplex inexperienced practitioners.

But, if I were permitted to give my opinion, I could prove, from an observation made by the author himself, that all the different varieties which he describes require the same treatment.

This author's words are,

" I believe it is a certain fact, whatever
 " may be the cause of a Puerperal Fever,
 " that within a limited time the whole ab-
 " domen is more or less inflamed, because
 " the belly always turns green and putrid
 " in a very short time after death, in the
 " same manner as we find it happen to those
 " who have died of an inflammation of the
 " bowels *."

Thus, whatever be the cause of the Puerperal Fever, the cause of death is the same

* Dr. Kirkland on Child-bed Fevers, p. 55.

in all its varieties, viz. abdominal inflammation; and therefore the cure must be conducted on the same principle, or that which is calculated to obviate this inflammation, for which reason all of them require the same or a similar treatment.

If young practitioners think proper to be guided by my experience, which I am inclined to think will not mislead those who trust to it, I would lay down the following brief rule for their direction.

Whenever a lying-in woman complains of a fixed pain in the abdomen, attended with a quick pulse, a practitioner ought immediately to bleed and purge his patient, without perplexing himself about the cause of the disease.

I have had an opportunity of attending a great number of cases of Puerperal Fever, arising from various causes besides contagion; for I have seen it produced by cold, by fear, by errors in diet, by too early fatigue, and premature endeavours to appear well,

well, by the application of putrid matter to the uterus, &c. But I attended to the symptoms without being solicitous about the cause. And, whenever a patient complained of a fixed pain in the abdomen, attended with fever, I bled and purged her without regard to the cause. And I found this treatment equally successful in every case, when those symptoms were present, whatever was the cause of the disease.

In order therefore to treat the Puerperal Fever in a successful manner, practitioners must be guided more by the symptoms than the cause.

But, besides the propriety of bleeding, the diarrhœa, which so frequently takes place in the Puerperal Fever, has been, in like manner, the source of no little controversy among physicians ; some considering it as critical, and others as symptomatic.

Were I permitted to interpose my opinion, I should not hesitate to assert that the diarrhœa,

rhœa, which takes place in this disease, is entirely critical.

I am decidedly of opinion that the diarrhœa, in the Puerperal Fever, is always either critical, or an effort to a crisis. It is an attempt made by nature to cure the disease, which, in the beginning, has a tendency to carry off the abdominal inflammation, and, in the progress of the disease, to evacuate the serum, that may happen to be extravasated in the cavity of the abdomen. And, though it may fail in these purposes, yet the salutary tendency of the discharge is sufficiently obvious. My opinion, in this matter, is supported by an extensive experience.

A spontaneous diarrhœa proved completely critical in the case of Janet Wier, No. 11, and in several others. And by this lesson, which nature taught me, I profited very much; for, after bleeding at the beginning, it was by an artificial diarrhœa alone, that I was able to bring the disease to a favourable termination. And, in all the cases, in which I could not
excite

“ arrhœa could not be excited even by purgatives for some days *.”

An artificial diarrhœa proved critical in the foldier’s wife, mentioned in Dr. Denman’s Essay on the Puerperal Fever; for, after getting the antimonial powder, “ she had seventeen stools, like yeast in appearance, within six hours after the repetition of the powder †.”

And a spontaneous diarrhœa proved critical in the tradesman’s wife mentioned in the same Essay, after continuing six days ‡.

With respect to the efficacy of emetics in curing the Puerperal Fever, as practised by M. Doulcet of Paris, I can say nothing from my own experience. The success of this method has been so much extolled, that I had a strong inclination to try it; but popular opinion was so much against this practice, that I could not venture without running the hazard of universal opposition. And

* Dr. Home’s Clinical Experiments, p. 68 and 87.

† Dr. Denman on the Puerperal Fever, p. 31.

‡ Id. *ibid.* p. 36.

there was no temptation to run any risk, or to try the effects of doubtful medicines, because I had already discovered a certain remedy for the disease, in bleeding and purging.

Besides, the success of emetics is confined to the very instant, or moment of attack, at which I never happened to be present, in any case. And so powerful were the prejudices of the people, in this city, against the practice of exhibiting vomits to lying-in women, that there would not have been found a nurse, or midwife, to give such a medicine if it had been proposed. At the same time, I can readily believe, that emetics are not only innocent, but may be given with advantage, at the beginning, or during the cold stage, which ushers in the disease, when the blood is accumulated in the internal parts. The effort of vomiting, therefore, at that time, by determining the circulation to the surface of the body, unloads the internal parts, and thereby prevents the abdominal inflammation, which would otherwise take place. But after the disease has subsisted for some time, and inflammation
taken

taken place, emetics, by agitating the system, have a tendency rather to aggravate than mitigate the malady.

F I N I S.

ERRATUM.

Preface, p. 8, last line, for *the same treatment*, read *a similar treatment*.

